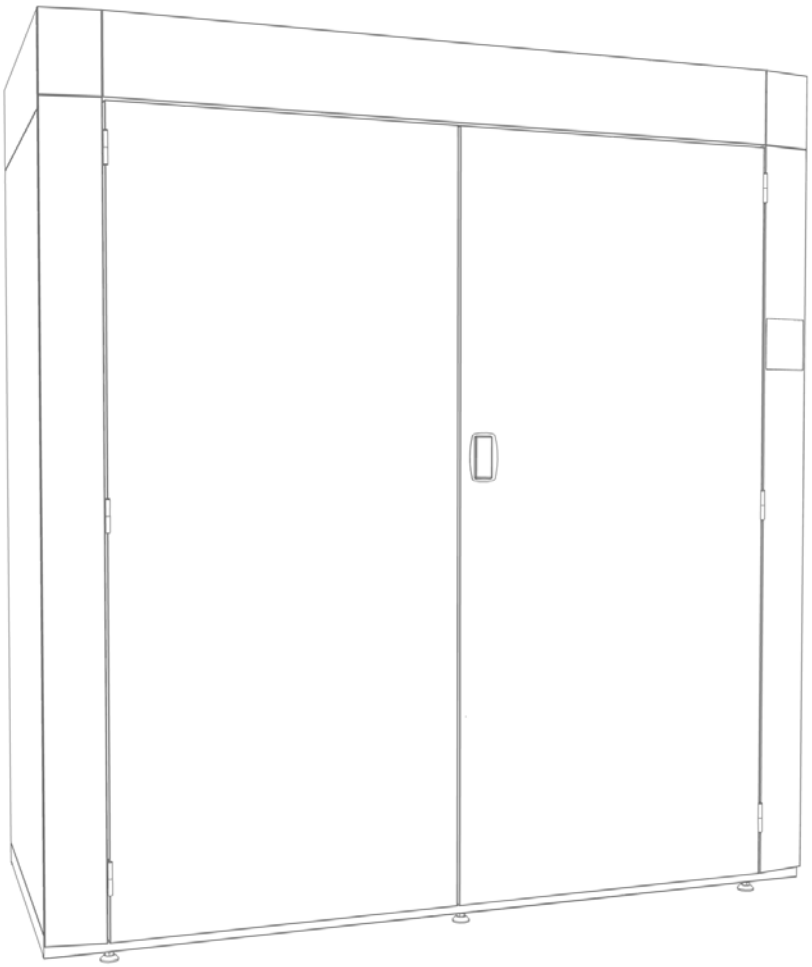

Installation and operation manual

Drying capacity of 6 large overalls equal to 30 kg

535877

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Thank you for choosing the drying cabinet.
We hope that it will be of great use for you and ask you kindly to read the instructions carefully.

IMPORTANT!

FOR YOUR SAFETY, the information in this manual must be followed to prevent property damage and personal injury.

NOTE: The paragraphs marked “WARNING” and “CAUTION” appearing in this manual are not meant to cover all possible conditions and situations that may occur. It is very important that water and electricity are handled with great care and respect, by both installation technicians and end users.

Safety regulations

Throughout this manual you will find text warnings in text boxes: “WARNING” and “CAUTION”. In these boxes you’ll find the safety measurements you’ll have to take; end user, service staff or installation staff.

CAUTION

Indicates hazardous situation that, if not avoided, could cause minor personal injury or property damage.

WARNING

Indicates hazardous situation that, if not avoided, could cause severe personal injury.

You will also find precautions marked: IMPORTANT and NOTE. These are followed by information of what should be considered.

IMPORTANT: to inform the reader of special steps that must be taken in order to prevent injuries on the cabinet.

NOTE: to inform what is important to know, but it cannot cause personal injuries or injury on the cabinet.

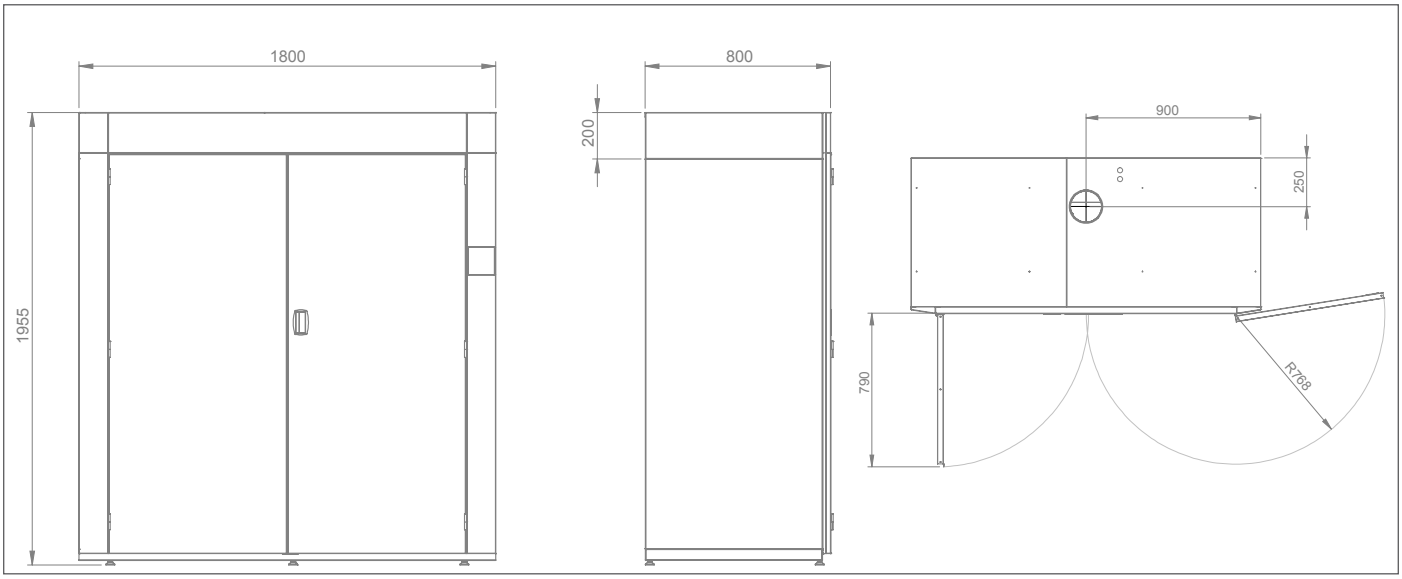
WARNING

To minimize the risk of fire, electrical shock, personal injuries or death when the cabinet is in use the following precautions must be followed:

1. Read the instruction before using the drying cabinet.
2. Follow the instructions in step 4 for proper grounding.
3. Never dry textiles that have been washed, dipped or exposed to fire dangerous substances or fluids.
4. Never add fire dangerous or explosives substances to the cabinet.
5. The cabinet is not a toy. Look after children who are around the cabinet.
6. Never connect the cabinet with an extension cable.
7. Only use the cabinet for what it is designed for: drying clothes.
8. Always turn off the main switch before performing any service on the cabinet. Only authorized service technicians should perform service.
9. Always follow the installation manual. The electrical connections must be installed by authorized personnel.
10. Keep after the cabinet. If it is exposed to violence there is a risk that certain security functions will stop working. Please contact your nearest service partner if you are unsure of the cabinet’s status.
11. If the electrical cable is damaged, it must immediately be changed by a person with electrical authorization.
12. The doors shall always be shut when the cabinet is in use. Do not try to manipulate the lock of the doors. It can lead to personal injuries. If the cabinet does not stop when the doors are opened during the drying phase, call for service. The cabinet shall not be used if the drying program is active when the doors are open!
13. Look after the area around the evacuating pipe so it is clean from dust and dirt.
14. To get the best drying result, follow the garments washing and drying advice.
15. Never use the cabinet if any panel is broken or removed.
16. Never use the cabinet if any parts are broken or if the inside is broken.
17. Never try to manipulate or connect past any safety functions.
18. If the cabinet is not assembled after the manufacturer’s instructions, there is a risk that the cabinet can cause personal injuries or injuries on property.

Specification

Dimensions



Technical information

Loading capacity, number of suits	6	
Evacuated air, max, m³/h	600	
Heating effect, kW	12,0	
Total effect, kW	12,45	
	Membrane	Cotton wool
Drying capacity, g/min *	55	45
Drying time, min *	175	65
Energy consumption, kWh/kg	0,98	0,34
Part No	131027	

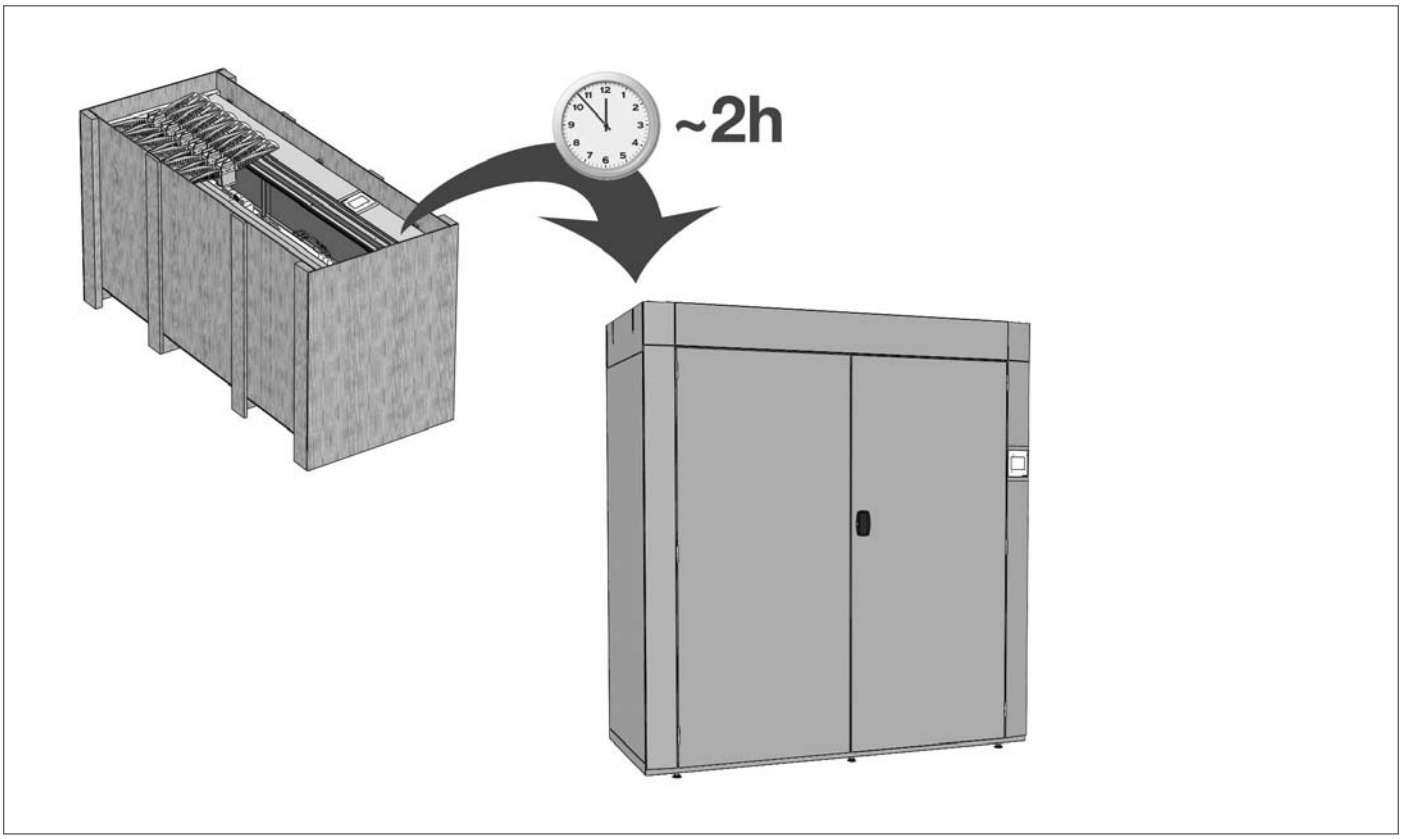
*Drying of 20 kg fire suits (dry weight) washed and high-spinned to 5o % residual moisture for membrane suits and 15 % for cotton wool suits.

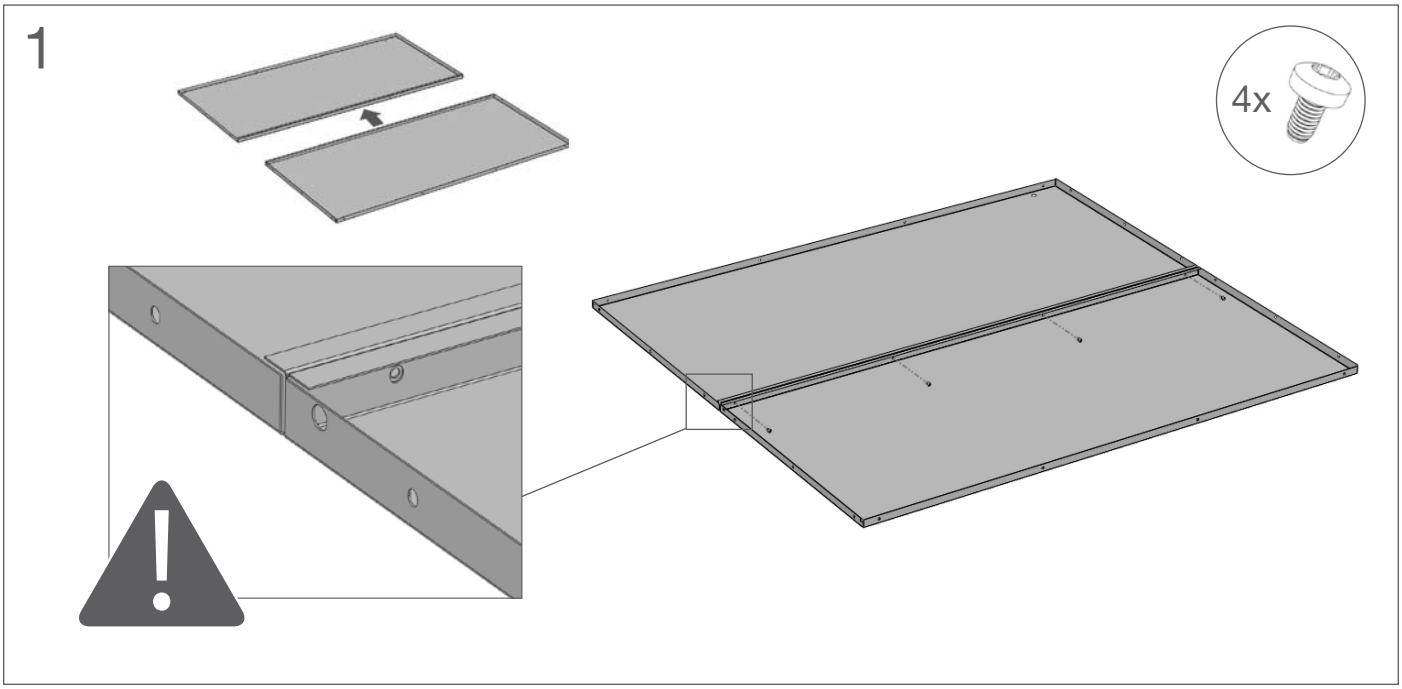
Assembly instructions

Tools

You need the following tools to easily install the drying cabinet.

- Cordless screwdriver
- Wrench
- Hex key 3 and 5 mm
- Level
- Torx screwdriver bit no. 25





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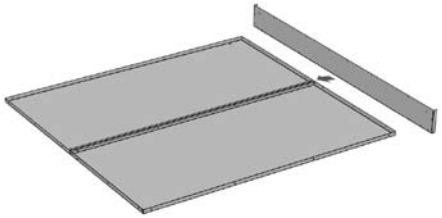

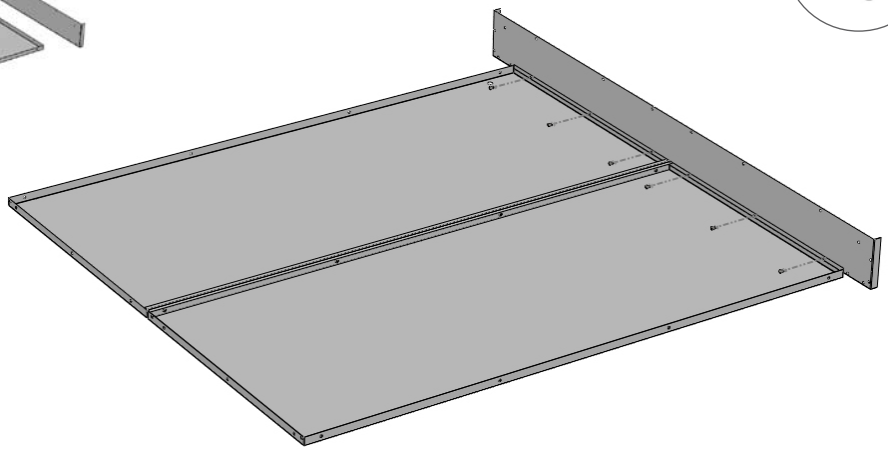

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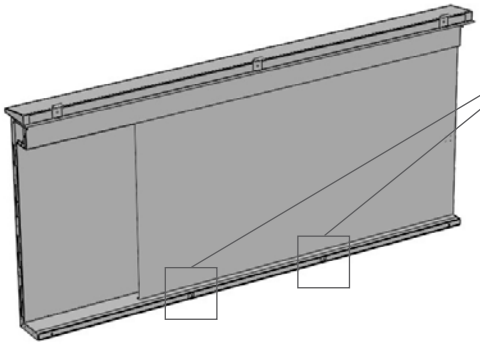

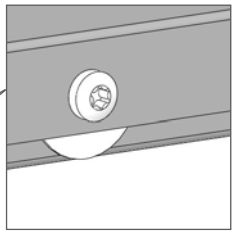

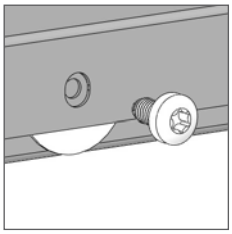

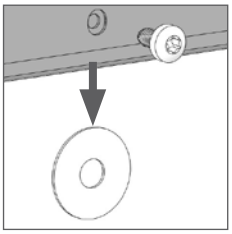

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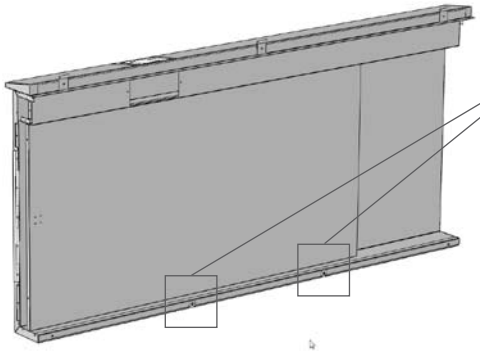

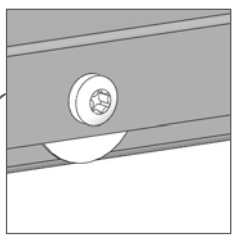

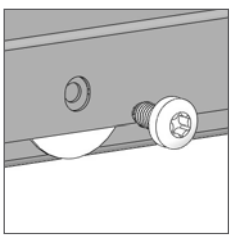

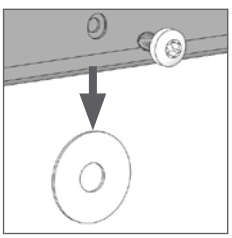

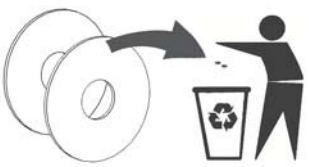

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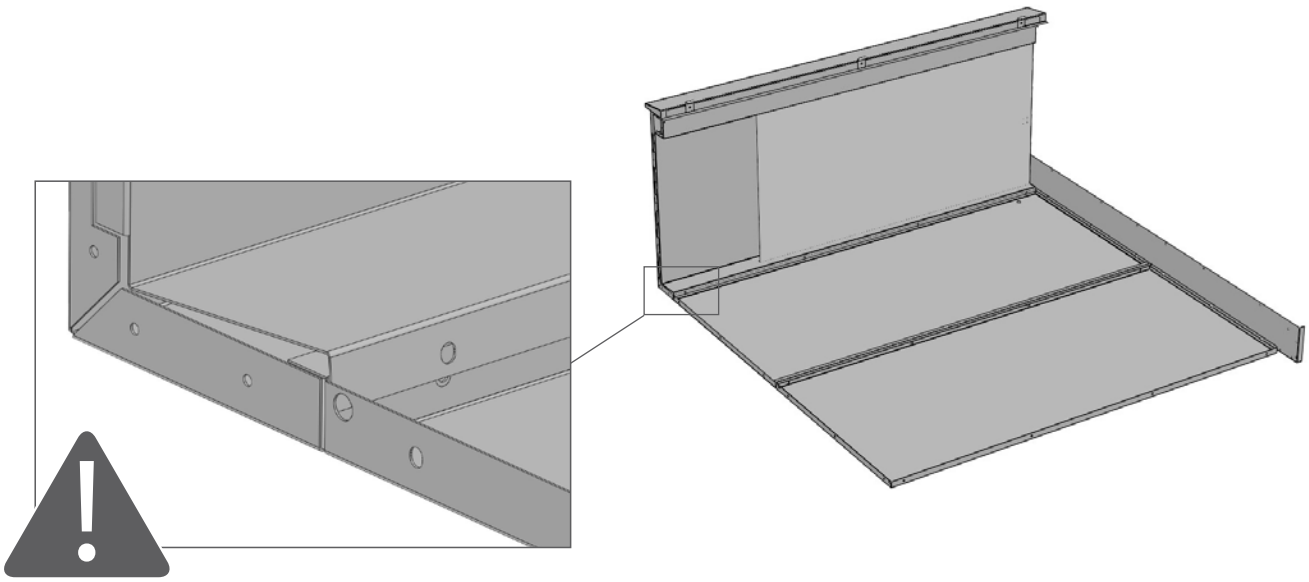

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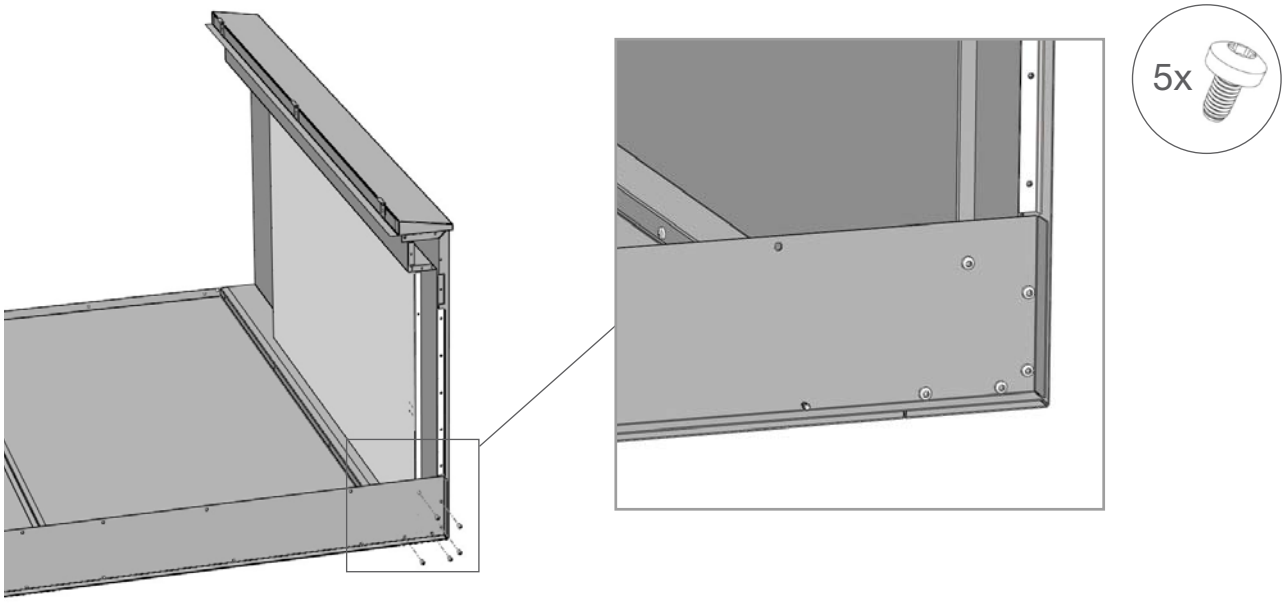

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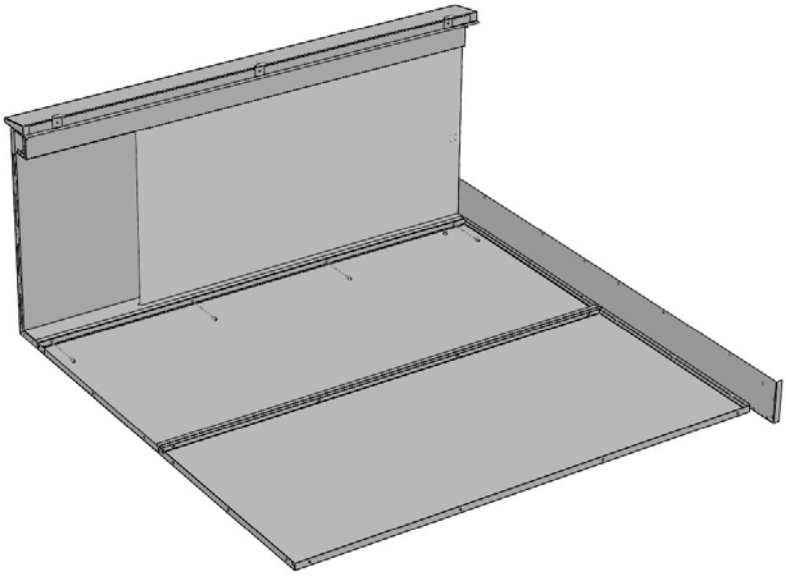

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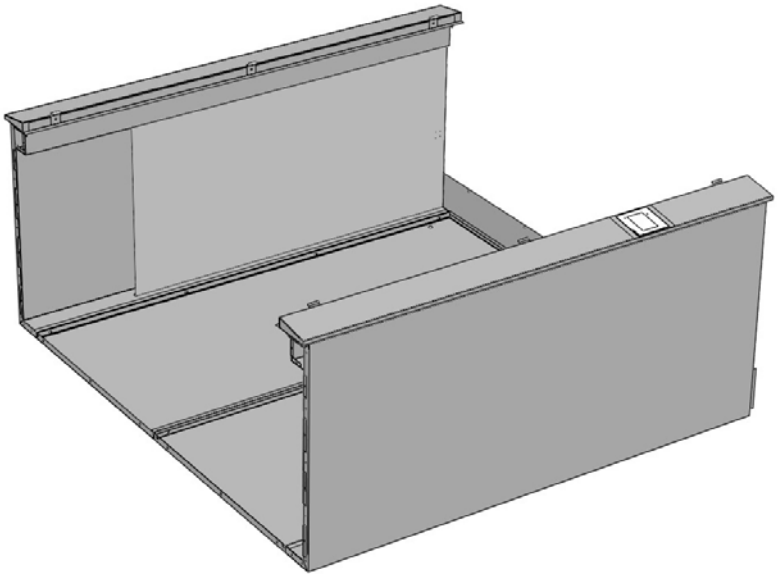

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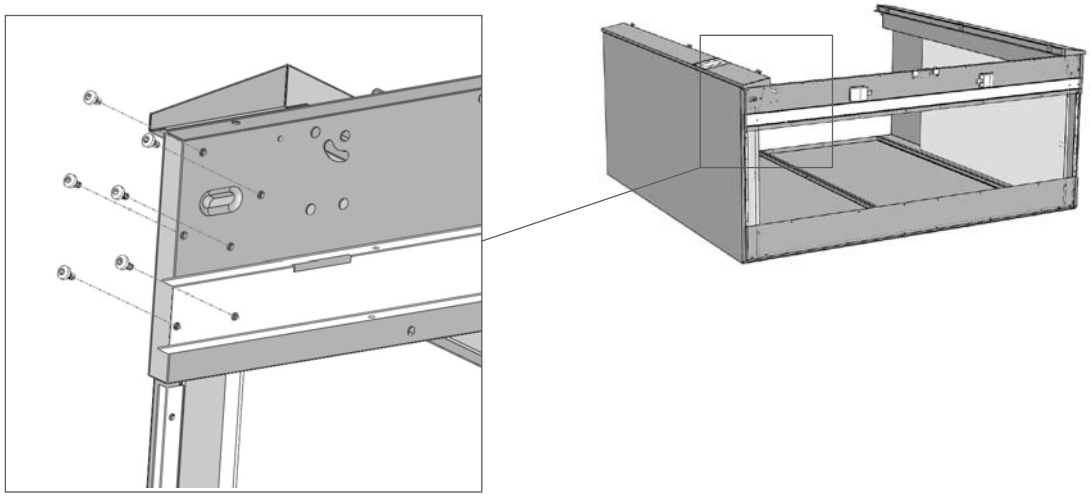

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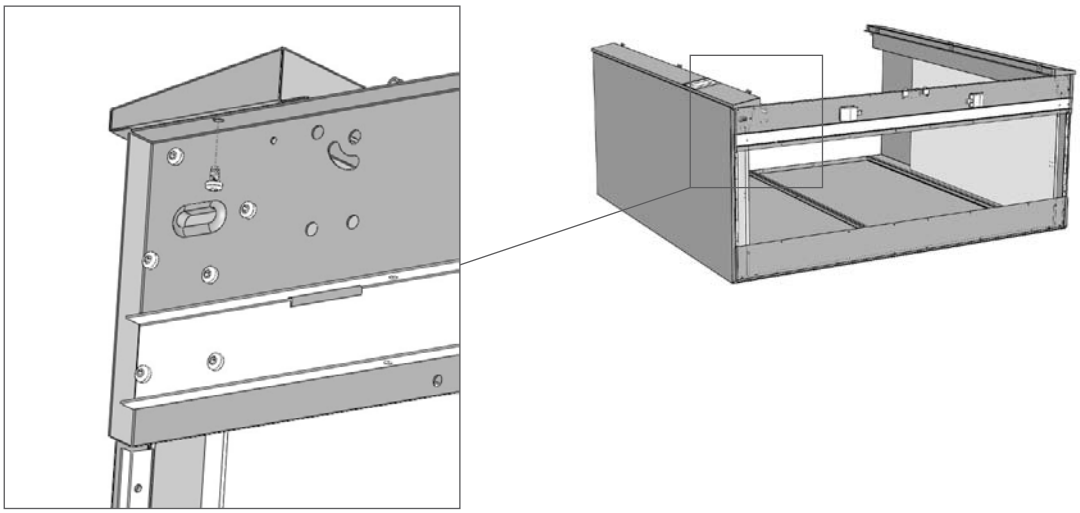

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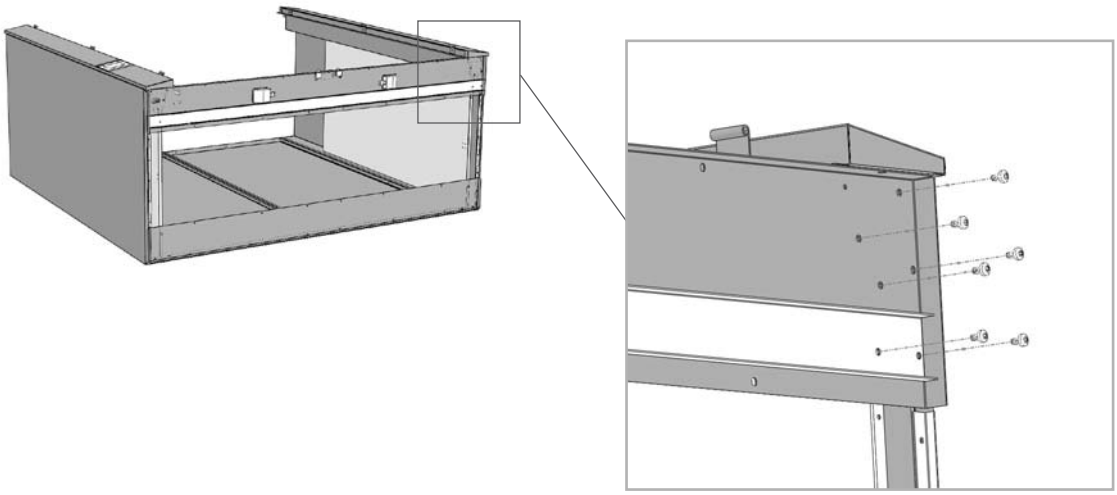

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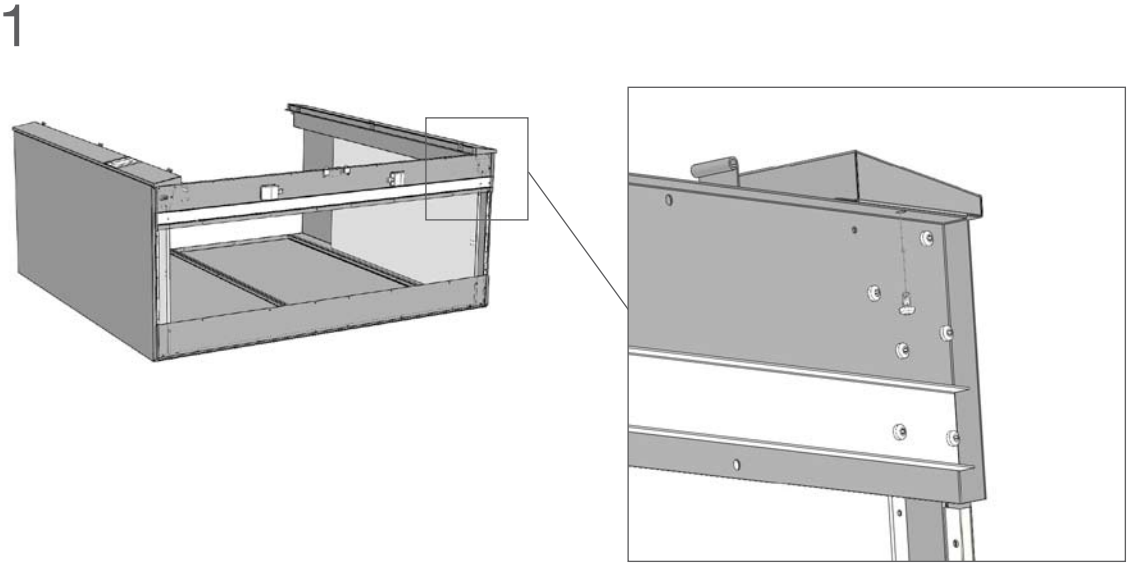

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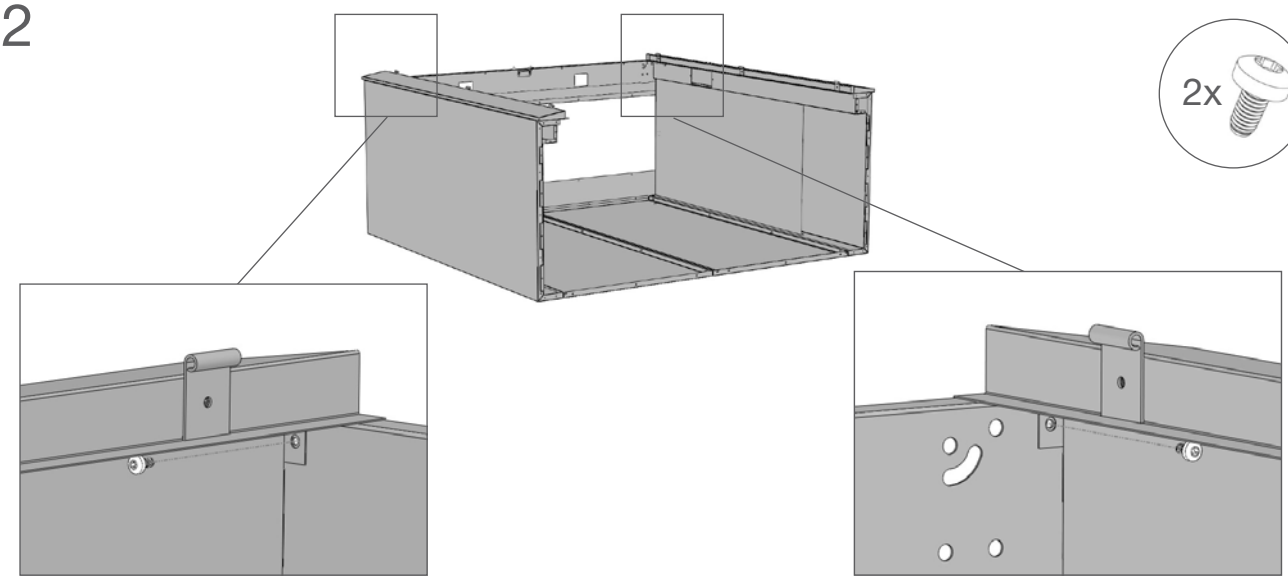

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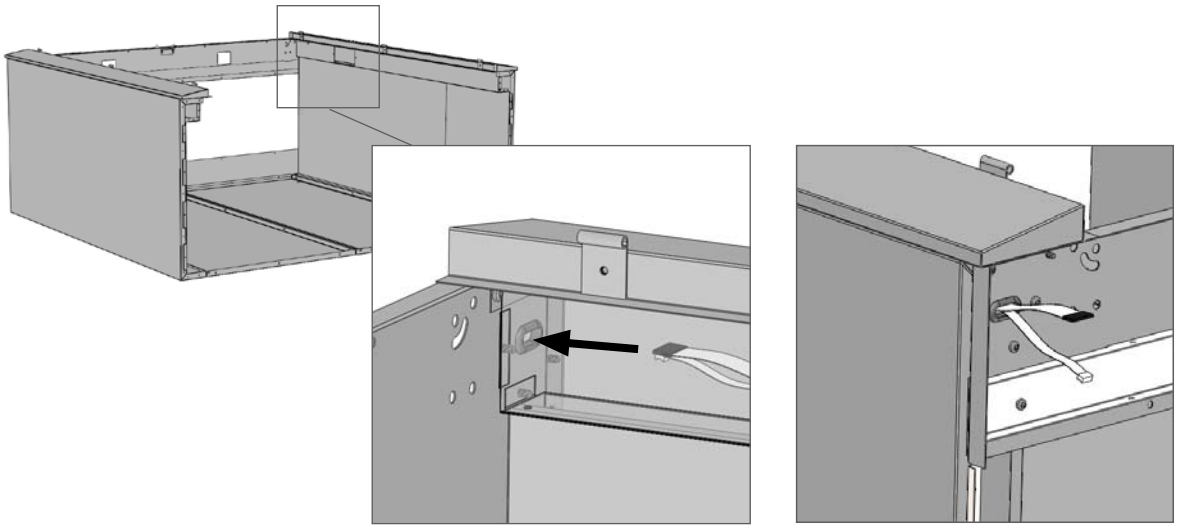

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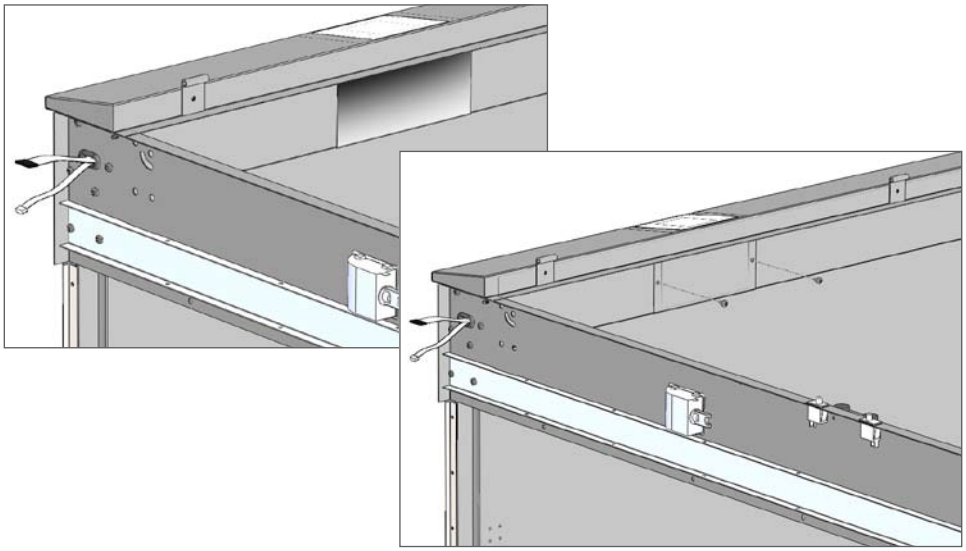

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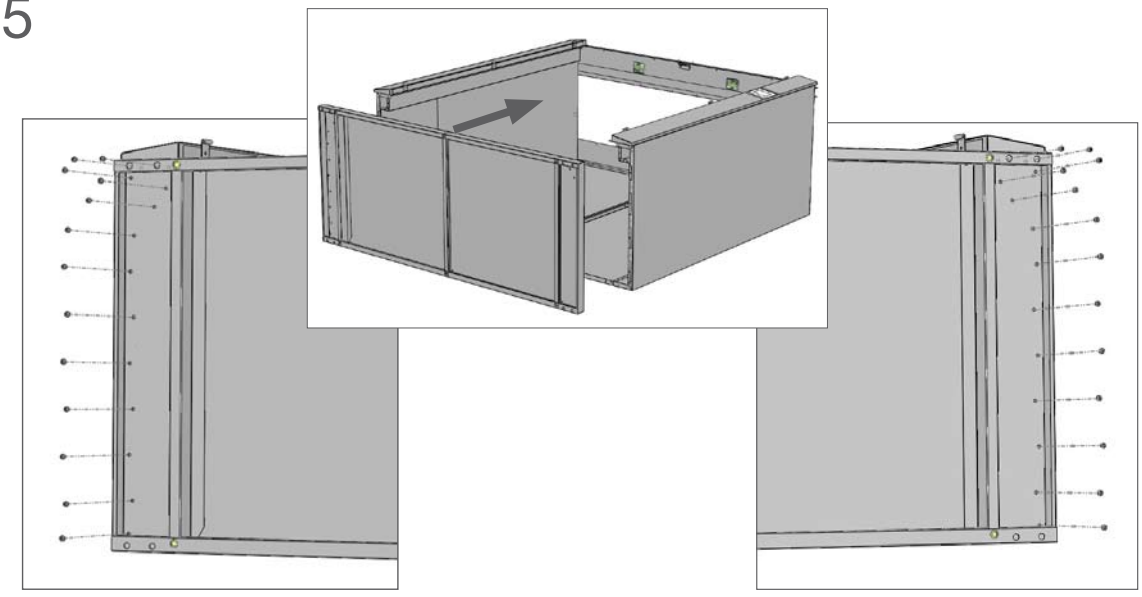

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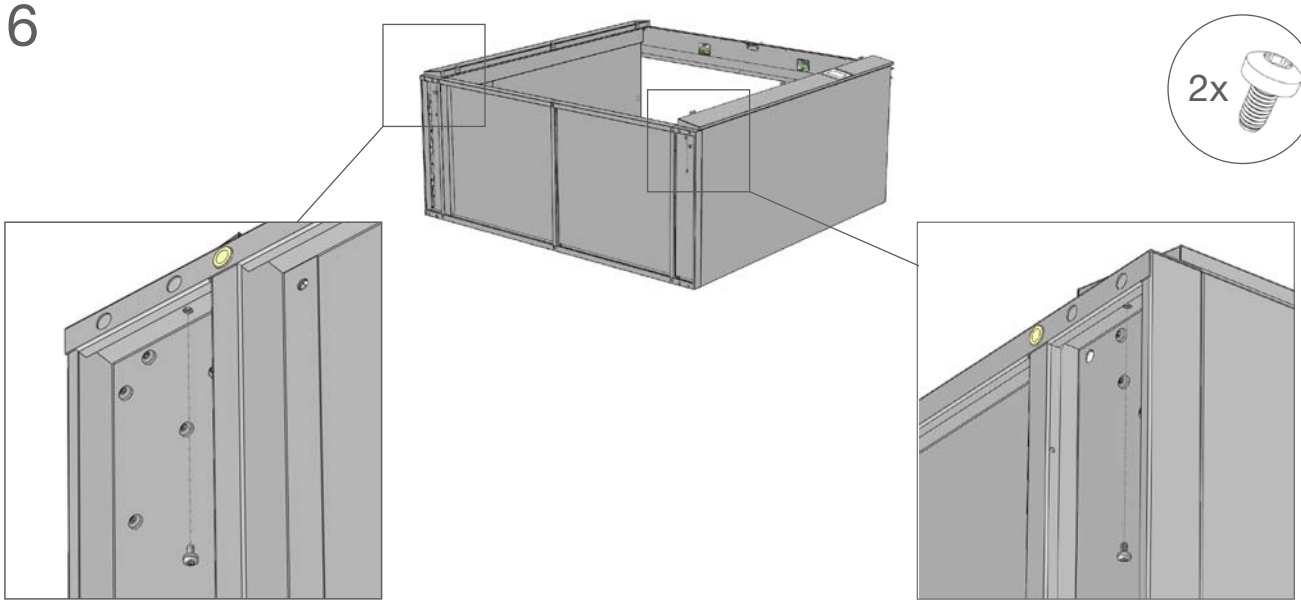

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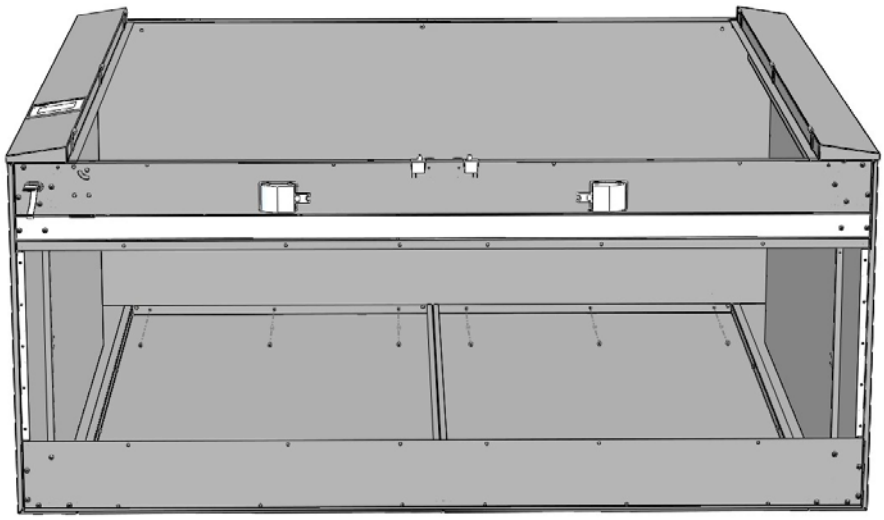

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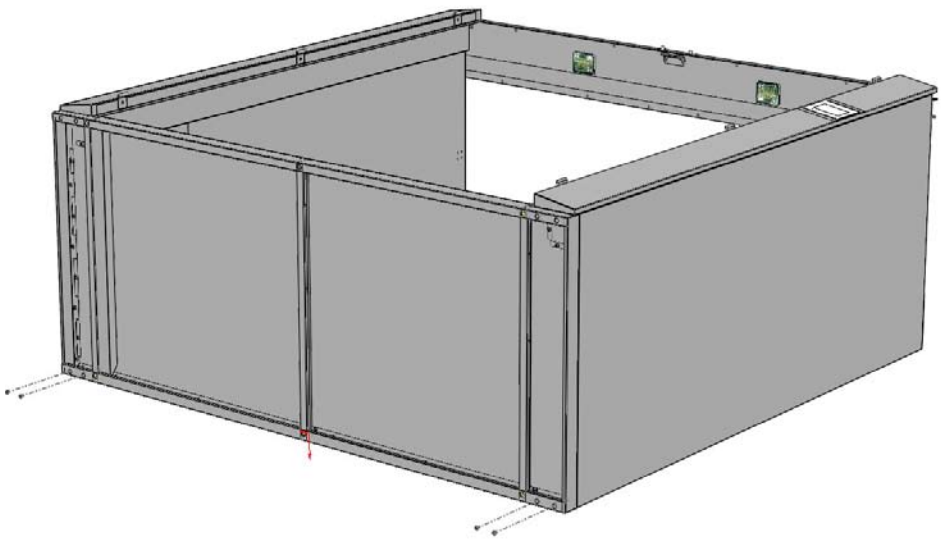

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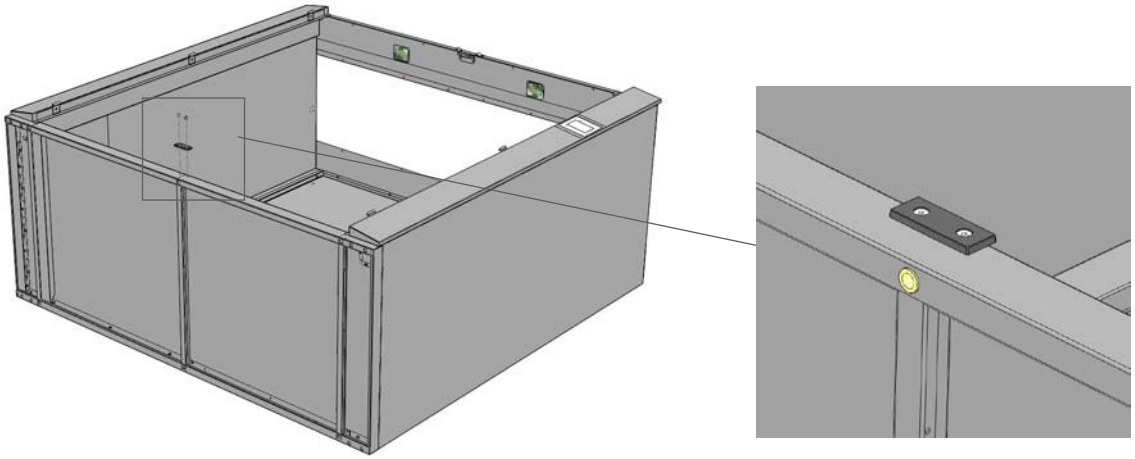

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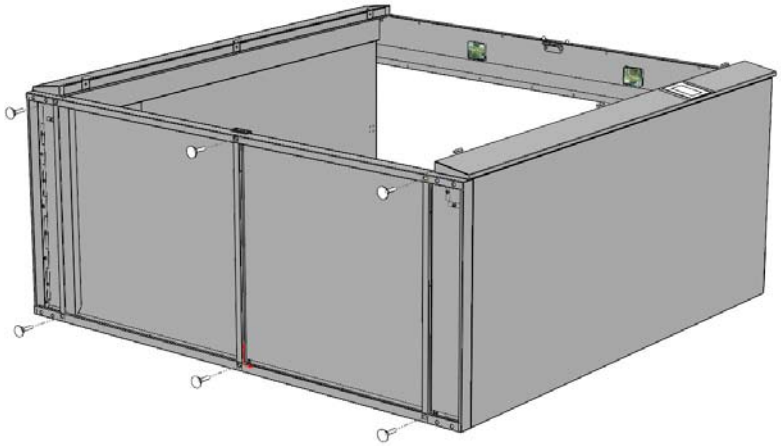

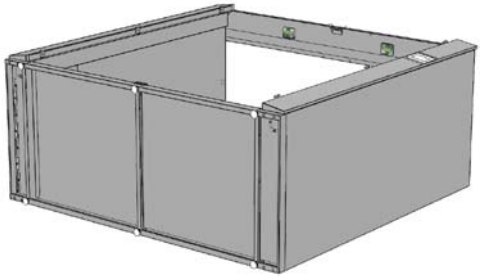

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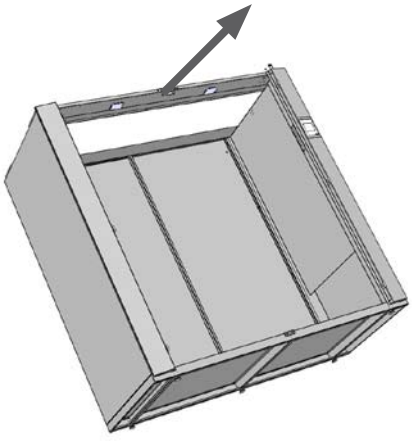

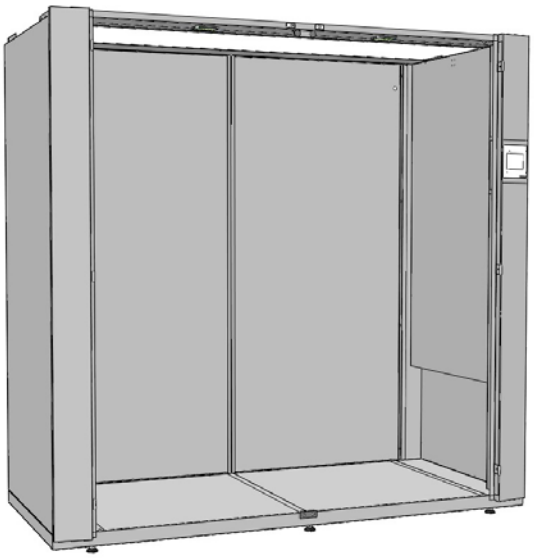

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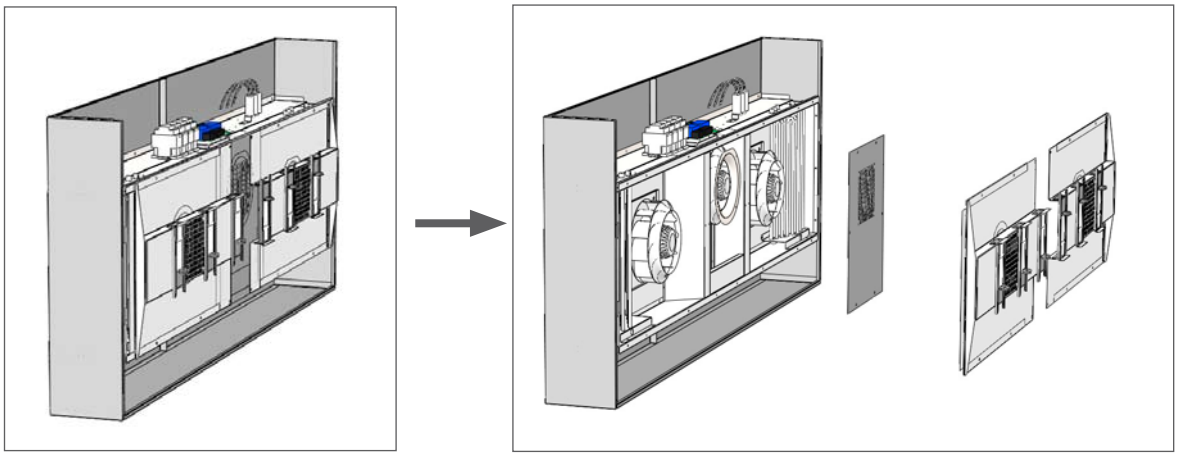

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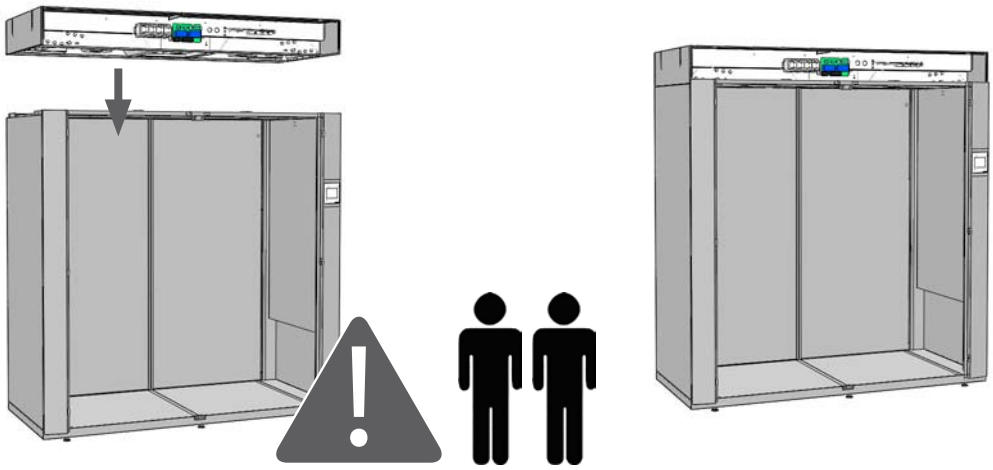

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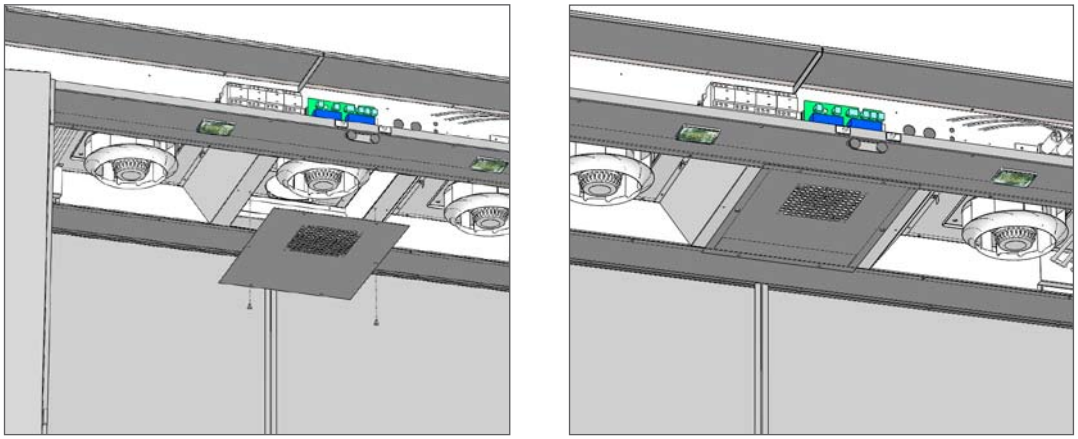

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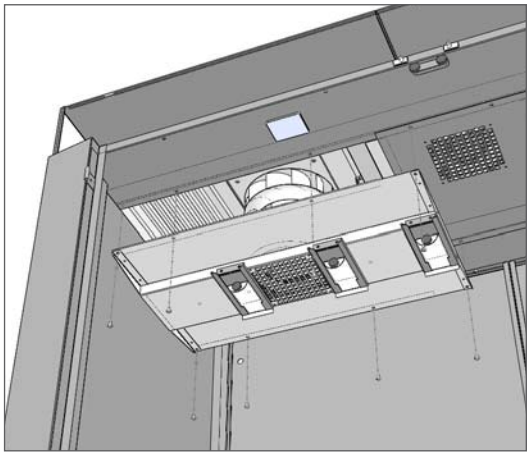

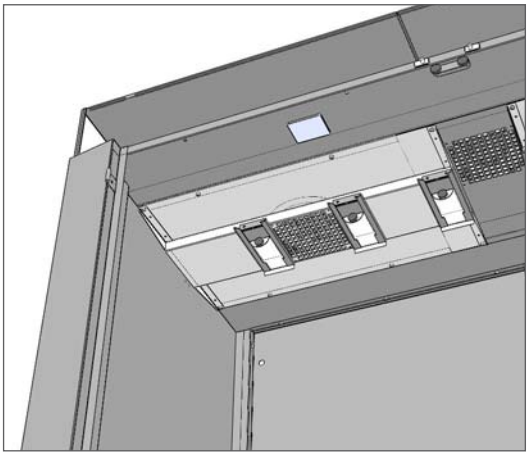

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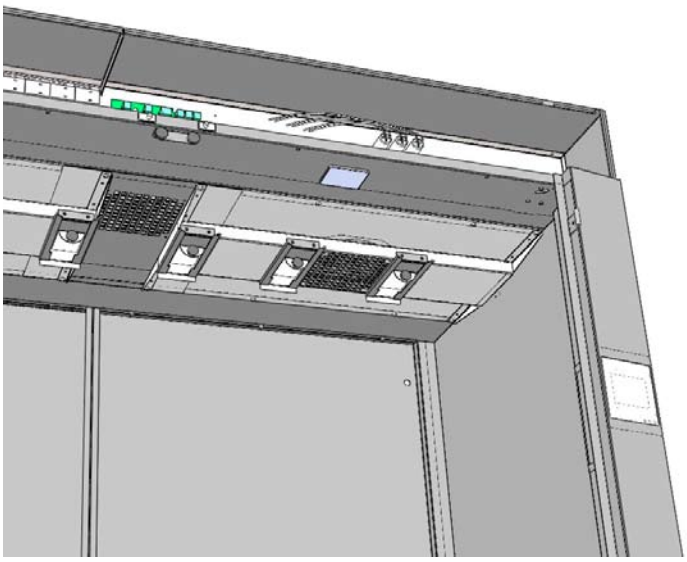

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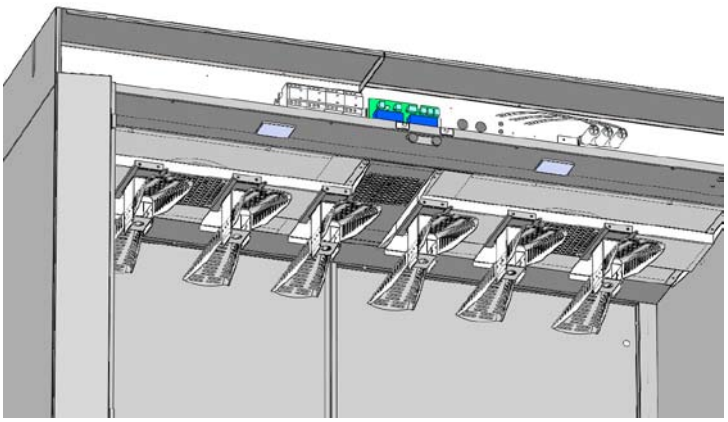

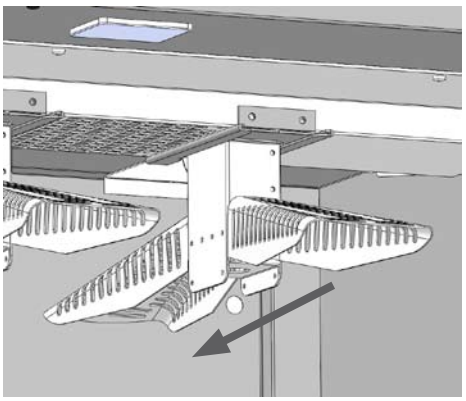

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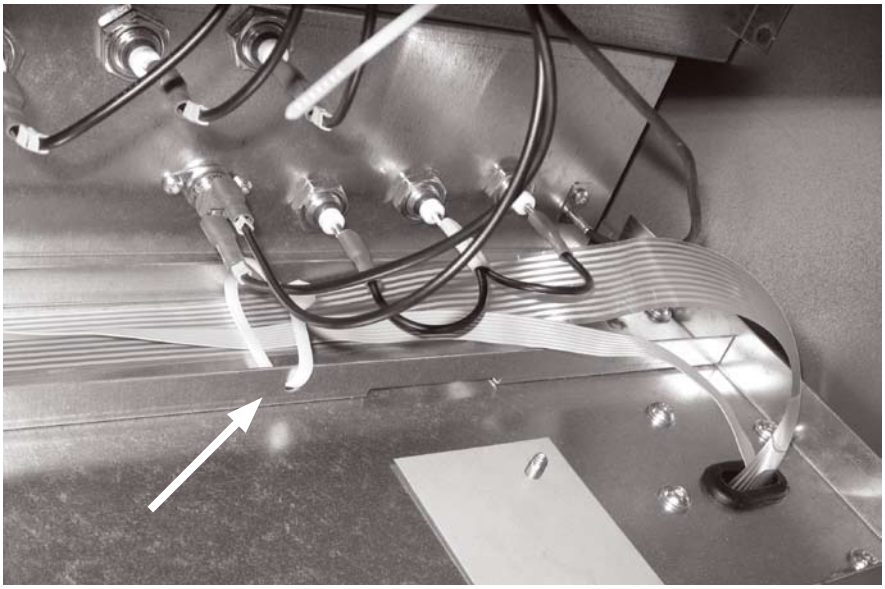
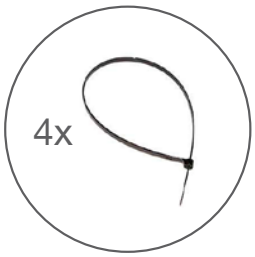
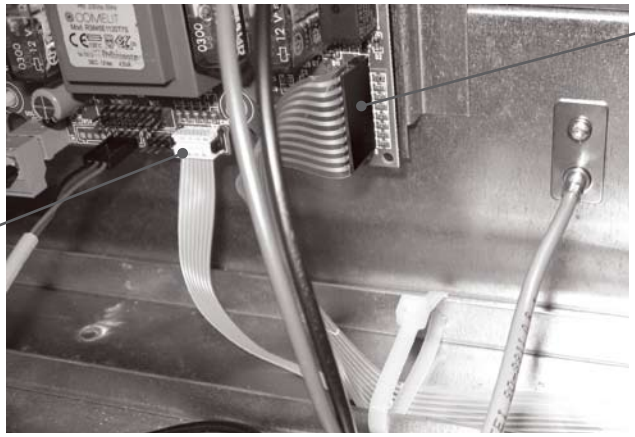




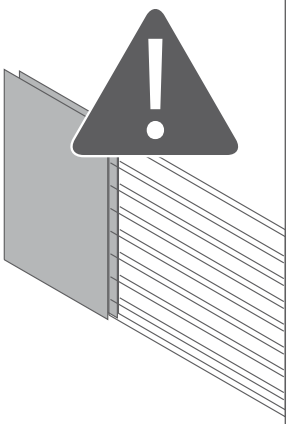
29 Connect the cables

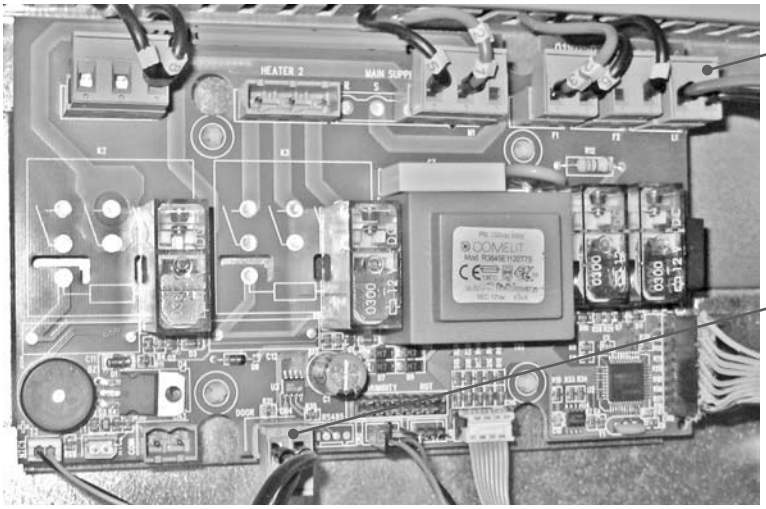


Keypad

LCD

The side without hole pattern to the left.

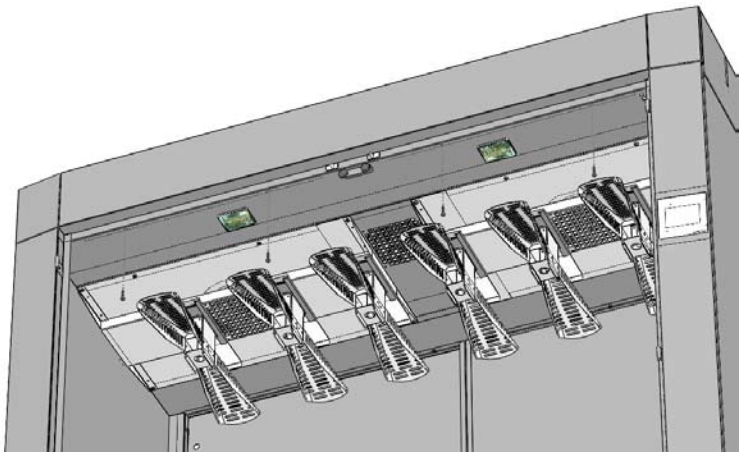




Lights

Door switch

30



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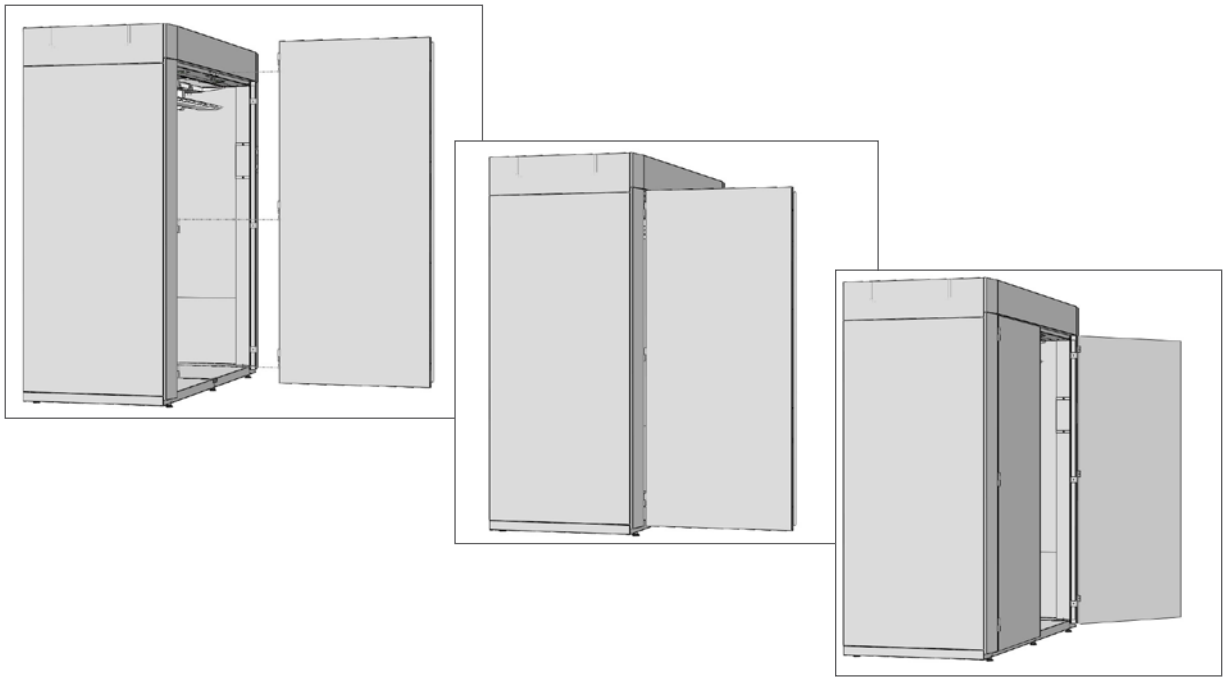
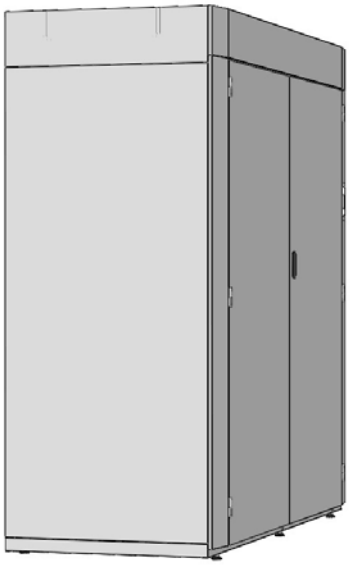
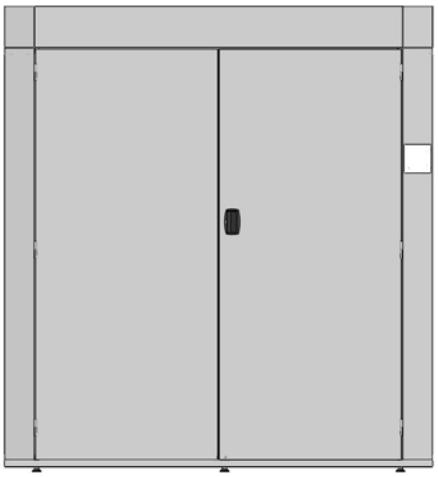






Installation of the cabinet

Step 1: Put the cabinet in place

Place the cabinet with enough space in front of the cabinet and on the sides to be able to open the doors.

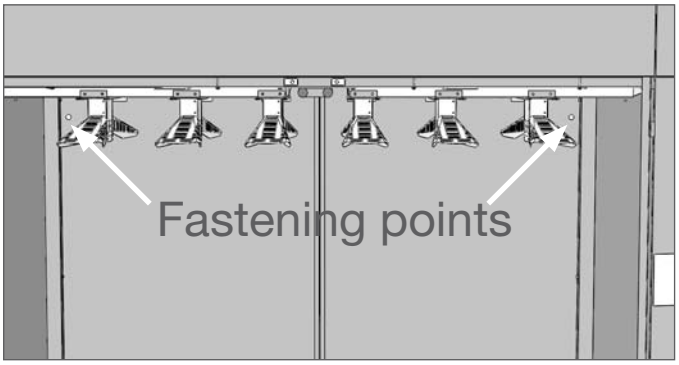
The feet of the cabinet can be adjusted from the inside with the help of a Hex key. The feet must stand free on the floor and have an even weight distribution. Use a leveler and control that the cabinet is leveled; horizontally and vertically.

NOTE: We recommend that the cabinet is installed on a firm and leveled floor.

Step 2: Fasten the cabinet to the wall

Use the stoppers, screws and washers to secure the cabinet through the back plates. (See picture.)

NOTE: Please control that the cabinet is leveled and cannot be tilted.



ATTENTION

Never place the cabinet in direct contact with wooden material. Always use the stoppers to prevent the cabinet from direct contact to a wooden wall. Leave a security distance of at least 30 mm.

Step 3: Connect the cabinet to the ventilation channel

For further instructions, se page 20: Requirements for ventilation.

- Do not use ventilation channels made of plastic or foil.
- Place the cabinet so that the ventilation channel is as short as possible.
- Make sure that the ventilation channel is cleaned when a new cabinet is installed.
- Use a 160 mm rigid or flexible metal duct to the evacuation connection.
- If you use rigid ducts, it is important that the male connector of the ventilation tube on each section follows the air direction.
- The construction shall be as straight as possible.
- Always isolate ducts that go through non-isolated areas. The condensation makes dust and dirt get stuck in the channel.

NOTE: If the cabinet is not connected according to these recommendations, the warranty is no longer valid.

Step 4: Connect the drying cabinet to the main switch

NOTE: Only an authorized electrician is allowed to install the electrical connection.

The cabinet is prepared for electrical connections: 400 V, 3-N, 50 Hz.

WARNING

To prevent that fire and electric shock appear, the cabinet MUST be connected according to the color codes on the cables.

It is always the buyer that has the responsibility to check that an authorized electrician makes the electrical connections of the cabinet.

WARNING

To prevent personal injuries, the cabinet shall always be connected permanently through an all pole main switch. Always ground the cabinet!

Also check that the connecting cable has a strain relief bushing. If not, there is a risk that the cabinet will be live.

Step 5: Control that the heating relay is working

Shut the doors and start the cabinet, after about 3 seconds you can hear when the heat relays hit. Wait a couple of minutes and control that the outgoing air channel becomes warm.

If the outgoing air channel does not get warm, go back to step 4 and control that the electrical connection is installed correctly.

Requirements for ventilation

WARNING

A drying cabinet produces inflammable dust. To minimize the risk for fire, the evacuation of the cabinet must be connected to a ventilation channel that evacuates the air.

Never let the evacuated air into a room or a surrounding where there is a risk for ignition.

Do not use ventilation channels in plastic or fire dangerous material.

Ventilation channel – choice of material

Ventilation channel, ducts, connections etc are not included.

The ventilation channels shall be at least 160 mm in diameter and should not have channels or similar on the inside.

We recommend that the ventilation system is built with rigid metal ducts for best result. Flexible evacuating ducts for drying cabinets can also be used.

NOTE: Never use flexible ducts through walls or other covered areas.

NOTE: Do not screw or nit the ventilation channel, so that the screws will come through the inside of the pipe. This construction will gather dust and impaire the cabinet's performance.

The channel shall always be separated from the other ventilation in the house.

Requirements for incoming air

In order to make the cabinet work properly, it is very important that there is enough incoming air in the room. The incoming air must be at least 4 00 m³/hour.

If the cabinet is placed in a room where the incoming air is not enough, we recommend that you install an air exchanger. Contact PRIMUS for more finformatfion.

Ventilation channel – design

IMPORTANT: Always make the channels as short as possible.

NOTE: If a drying cabinet is installed in an old ventilation channel, please clean the channel properly.

In order to make the cabinet work properly, the incoming airflow must be enough. The amount of evacuated air per hour is depending on how high the pressure fall in the ventilation channel is.

Material, the design and the length of the channel have a large impact on the air flow. In order to get the best possible performance, the pressure fall shall be as low as possible.

When the air is transported through the channel, it is exposed to different kind of resistance. Factors that give a low pressure fall:

- Smooth inner walls on the pipe
- Large diameter on the pipe
- Short length on the pipe
- Few curves
- Few angels (90 degrees)

Evacuated amount of air and pressure fall

In order to get drying cabinet to work properly, the ventilation channel shall be designed to get an out coming air fow from the cabinet of about 300 m³/h. When the cabinet is installed to an existing channel system, the cabinet can be calibrated to optimize the air fow.

In order to gain this air flow, the pressure fall must not exceed 210 Pa. By an airflow of 300 m³/h and a diameter of the pipe of 160 mm, this corresponds to a straight, smooth ventilation channel of 140 m.

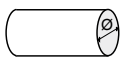
Pressure fall estimation

The counter pressure in the ventilation channel can be measured with a pressure meter. The measuring point shall be placed by the cabinets evacuating outlet.

In order to estimate the pressure fall without meter equipment we recommend the following:

- Identify the ventilation channel's incoming components in the air flow direction.
- Check the part pressure fall for each component in the table.
- Calculate the total amount of pressure fall by adding each parts pressure fall.

The table shows the most common components in a ventilation system. The information shall be considered as approximate data. For more information, contact the manufacturer of the parts of the system. Please note that the data in the table is for an air flow of 300 m³/h.

Component			**Pressure fall**
Circular channel	ø, mm		Pa/m
	125		4,5
	160		1,5
Pipe bends 90°	ø, mm	r, mm	Pa/bend
	125	125	10
	160	160	4
Reduction	Transition, mm		Pa/reduction
	125 to 160		4
	160 to 125		17

Example: 10 m long 160 mm channel with 3 pipe curves which gives an estimated pressure fall of (6 x 1,5) + (3 x 4) = 21 Pa.

Increase the outgoing air flow

The drying cabinet gets its air from the small space between the doors and the cabinet. An increased incoming air flow gives automatically an increased outflow. The doors are kept in place by two magnets, which both are assembled to a bracket. To increase the incoming air flow, loosen the two screws on the bracket and push it forward.

Decrease the outgoing air flow

The cabinets function and automatic programs are optimized for the recommended air flow of 300 m3/h. If the design of the ventilation is made so that evacuated air flow exceeds 300 m3/h, the evacuation can be throttled with help of a damper. Contact a ventilation expert in order to find a proper solution for your ventilation.

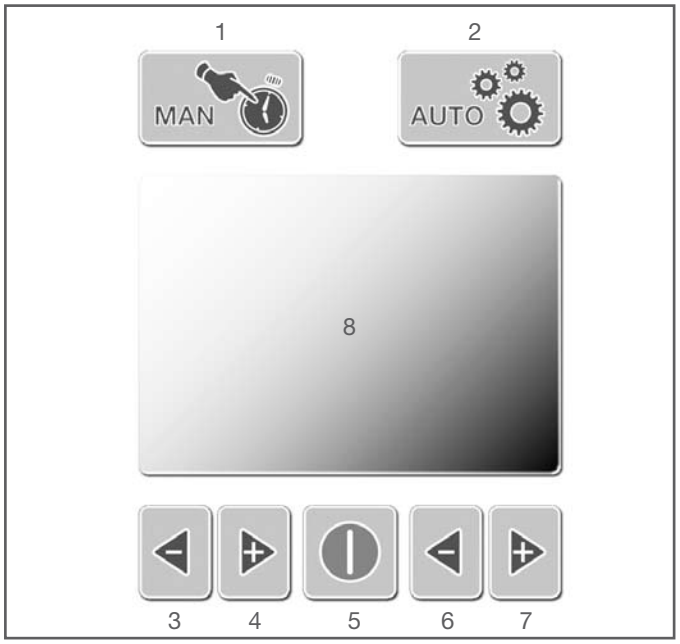
User manual

Fill the cabinet

To get the best drying result: try to dry the same type of fire-fighting suits at the same time. Distribute the clothing evenly in the cabinet. If less than six suits are dried, remove the hangers not used. The dampers are closed automatically.

Close the doors

The drying cabinet will not start until the doors are completely closed.



Keypad

1. Manual programme mode
2. Automatic programme mode*
3. Reduce the temperature
4. Increase the temperature
5. Start/stop the programme
6. Reduce the time
7. Increase the time
8. LCD-display

*Will also change programme when you are in the automatic programme mode.

Manual programme mode

In order to set the time and temperature, push key no 1. LCD-display shows the settings for manual programmes. The cabinet is preset on average temperature 80ºC and 1h and 30 minutes drying time.

Set the temperature

Increase or reduce the temperature with the arrow buttons 3 and 4. There are three levels:
Minimum (MIN) = 40ºC
Medium (MED) = 60ºC
Maximum (MAX) = 80ºC

The degrees stated above, show the maximum temperature of the warm air stream.

Set the time

Increase or reduce the drying time with the arrow buttons 6 and 7. The drying time can be increased to maximum 4 h. Lower temperature requires longer drying time.

Start

Push button 5 to start the cabinet.

Pause programme

To pause a working programme, open the doors. The drying time is paused. The cabinet will start again when the doors are closed and the start button is pushed. If the doors are left open longer than 10 minutes, the programme is interrupted.

Change temperature or time during drying

Temperature and time can be adjusted during the drying process and the programme is in the heating phase. When the cabinet switches to cool down, neither time nor temperature can be changed.

Interrupt a programme

To interrupt a working programme, push the START/STOP.

Automatic programme mode

The drying cabinet is equipped with the function HTS – Humidity Tracking System. This function is activated in the automatic programme mode. The drying time adjusts to the laundry in the cabinet and is controlled by a humidity sensor.

To choose automatic programme mode

Choose automatic programme mode by pushing button 2.

The drying cabinet have three different automatic programmes: *Membrane, Cotton wool* and *Stationwear.*
For these programmes the drying time is adjusted automatically.

Programme: Membrane

When automatic mode is activated, the programme *Membrane* is set as first choice. *Membrane* should be used for firefighting suits with membrane fabric. Drying temperature is 80ºC.

Programme: Cotton wool

To change automatic program, push button no 2 once more.

The programme *Cotton wool* should be used for firefighting suits with cotton wool stuffing. Drying temperature is 80ºC.

Programme: Stationwear

For station and sportswear like T-shirts, sweat-shirts, pants etc. Drying temperature is 60ºC.

Reactivation of impregnation

The programmes Membrane and Cotton wool have a unique function. By the end of the drying cycle the cabinets goes into reactivation mode. During 30 minutes the evacuation of air is stopped and the temperature is maximized. This hardens the impregnation of the suits.

Start programme

Push button 5 to start the cabinet.

Pause programme

To pause a working programme, open the doors. The cabinet will start automatically when the doors are closed, and the start button is pushed.

Interrupt a programme

To interrupt a working programme, push START/STOP.

Cool down

All programmes, both manual and automatic, have a cool down phase of 15 minutes. During cool down the textiles are reconditioned and the drying cabinet is cooled down. Time and temperature cannot be changed.

If the doors are opened during the cool down, the fans will continue. This is normal procedure.

CAUTION

If a program is interrupted before the cool down has finished, the ceiling of the cabinet could be very hot.

Maintenance

Installation during winter

If the cabinet is installed a cold winter day (below 0°C) and has been out in the cold, we recommend that it is kept inside a few hours before use.

Take good care of the cabinet

Only use a damp cloth with a mild detergent when cleaning the cabinet.

Never use solvent to clean the display.

Ventilation system

Loosen the ventilation pipe on the cabinet every year and clean if necessary around the evacuating channel.

IMPORTANT: Always switch off the electricity before starting to work with the cabinet.

Inspect with set intervals the complete ventilation channel; don't forget the outer wall. There can easily be leafs and other rubbish that chokes.

We recommend that you once a year, take down the service doors and vacuum clean around the fans and elements.

Keep your cabinet efficient and economical

- The ventilation channels shall be as short as possible.
- If possible, dry the same type of textiles at the same time.
- Do not dry with maximum temperature if you do not need to.